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Existing Data Sources as Tools for Entry-Stage Extension Professionals

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Tools of the Trade

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Abstract

Due to the nature of Extension, work across counties differs because efforts are grounded in the needs of a community and intentional programming helps address these needs. A common competency required for entry-stage Extension professionals is program development, which includes planning, design, implementation, and evaluation. Understanding a community's needs is a crucial aspect of the program planning process, yet new Extension professionals may not know where to locate existing information about their communities. Before creating Extension programs, Extension professionals should understand local communities and identify existing data to facilitate the needs assessment phase of program development.

Keywords: existing data, entry-stage professionals, needs assessment

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Introduction

Program development involves the four main steps of planning, design, implementation, and evaluation (Franz et al., 2015), and needs assessments are a critical component of planning programs. Due to the nature of Extension, work across counties differs because efforts are grounded in the unique needs of each community. A needs assessment for a particular community is useful because it identifies a gap between "what is . . . and what should be" (Witkin & Altschuld, 1995, p. 4). Indeed, a critical first step in program development is becoming familiar with the needs of a community (Futris & Schramm, 2015), and existing data can be used to guide program development, determine feasibility of programs, develop situation statements, highlight existing areas of need, and create predictive power. Early-career Extension professionals can use existing data to guide their program development processes.

Existing Data

Data comprises "factual information used as a basis for reasoning, discussion, or calculation" (Merriam-Webster, n.d., para. 1). Many agencies and institutions, including members of the health and service industries, schools and libraries, and businesses, maintain records (Witkin & Altschuld, 1995). These sources of existing data can be helpful to Extension professionals because they are readily available and cost effective to access. Zimmerman and Kahl (2018) published a guide for Extension professionals related to locating online data and navigating data websites. Herein we build on the work of Zimmerman and Kahl and outline additional

internal and external data sources.

Internal Data Sources

Internal data sources are "retrieved from inside the organization to make decisions for successful operations" (Johns & Scalia, n.d., para. 2). The key to locating internal data sources is determining who the gatekeepers are for the relevant kinds of data. New Extension professionals should start this process by contacting their supervisors and program leaders. Examples of internal data sources found in many state Extension systems include

- individual plans of work,
- annual accomplishment reports,
- past county needs assessments,
- advisory council minutes,
- county-level strategic plans,
- state-level strategic plans,
- customer satisfaction data,
- federal plans of work, and
- past statewide Agricultural Research, Extension, and Education Reform Act reports.

External Data Sources

External data sources are "all data outside [an] organization's operating systems" (Walters, n.d., p. 1). We compiled a list of external data sources useful to Extension professionals (Table 1).

Table 1.

Existing External Sources of Data for Extension Professionals

Resource	Description	Hyperlink(s)
U.S. Census	This resource has data about the U.S. population and economy (U.S. Census, n.d.). The U.S. Census website includes how-to videos on gathering and presenting data.	U.S. Census information: https://data.census.gov/cedsci/ Data Gems how-to videos: https://www.census.gov/data/academy/data-gems.html
U.S. Department of Education (DOE) and National Center for Education Statistics	These resources have data about U.S. schools, such as (a) state report cards, (b) district report cards, and (c) school report cards (DOE, n.d.). DOE and NCES existing data are valuable for educational programming,	DOE information: https://www2.ed.gov/rschstat/catalog/index.html NCES information: https://nces.ed.gov/

(NCES)	especially for 4-H.	
U.S. Department of Agriculture (USDA) and state departments of agriculture (e.g., Florida Department of Agriculture and Consumer Services)	Such resources have data regarding agriculture, natural resources, and nutrition (USDA, n.d.-a). The USDA Census of Agriculture has county profiles outlining numbers of farms, sizes of farms, and commodities grown (USDA, n.d.-b). Extension professionals can search by state and county to narrow results specific to communities.	USDA Census of Agriculture information: https://www.nass.usda.gov/AgCensus/
U.S. Environmental Protection Agency (EPA) and state environmental protection agencies (e.g., California EPA)	Such resources have data such as resident and business water usage and water characteristics (e.g., quality, quantity, availability) in a given area. State environmental protection agencies can be found across the United States.	U.S. EPA information: https://www.epa.gov/enviro/topic-searches
Centers for Disease Control and Prevention (CDC) Social Vulnerability Index (SVI)	This resource has information from health officials who identify communities likely to need support due to hazardous events such as hurricanes or disease outbreaks (CDC, n.d.). This resource informs on potential challenges related to vulnerability factors such as lack of transportation and crowded housing (CDC, n.d.).	CDC SVI information: https://svi.cdc.gov/map.html
The National Association of Counties (NAC)	This resource has data on nationwide issues such as public safety, transportation, and community development (NAC, n.d.).	NAC information: https://ce.naco.org/
State associations of counties (e.g., Arkansas Association of Counties [AAC])	These resources provide services such as legal representation, general research, training, and conferences to help county officials (AAC, n.d.). Member counties have local governments that collect data on topics such as commercial businesses, building footprints, zoning, and stormwater management (AAC, n.d.).	State associations of counties information: https://www.countyexecutives.org/state-associations
The Farm Bureau	This resource includes lobbyists who represent the agriculture industry at the national, state, and local levels (Farm Bureau, n.d.). County Farm Bureau offices have information regarding policy, events, and educational outreach (Farm Bureau, n.d.).	Farm Bureau information: https://www.fb.org/
Agricultural associations or other interest groups (e.g., farmers market coalitions)	Such resources are generally described as people or organizations with common concerns (Lumen, n.d.). For example, the Washington Apple Commission (n.d.) is a commodity group that supports "advertising, promotion, education and market development for the Washington fresh apple crop" (para. 1).	Farmers Market Coalition information: https://farmersmarketcoalition.org/joinus/

Conclusion and Recommendations

A guiding principle of Extension is ensuring its continued relevance and connection to the local community (Henning et al., 2014). Early-career Extension professionals can use existing data to write a situation statement for a plan of work or present a summary of existing data to an advisory council to discuss priority needs. Additionally, existing data can help one determine who should be on an advisory council, thus helping ensure an equal representation of stakeholders. Furthermore, existing data may be helpful when writing grant applications for local community organizations that traditionally support Extension programs, such as banks, nonprofit centers, library districts, and retail stores. Early-career Extension professionals can conserve their limited resources such as time and money by taking advantage of available data sources. These existing data sources should be used by Extension professionals as the first step in program development to address a variety of programmatic issues applicable to their local communities.

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